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(084061-0494)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Todd M. GOIN et. al.

Title: METHOD AND SYSTEM FOR ADJUSTING THE RELATIVE VALUE OF SYSTEM CONFIGURATION RECOMMENDATIONS

Appl. No.:   10/701,869

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Art Unit: 2451

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BRIEF ON APPEAL

Mail Stop Appeal Brief - Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Under the provisions of 37 C.F.R. § 41.37, this Appeal Brief is being filed together with a deposit account 08-2025 authorization in the amount of $540.00 covering the 37 C.F.R. 41.20(b)(2) appeal fee. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 08-2025.

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REAL PARTY IN INTEREST

The real party in interest in this Appeal is Hewlett-Packard Development Company, L.P.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to Appellant or Appellant's patent representative.

STATUS OF CLAIMS

Claims 1-20 are pending, rejected, and are being appealed.

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2005/0086645 to Diao et al. in view of U.S. Patent Publication No. 2003/0135609 to Carlson.

The claims in their current condition are attached hereto in the Appendix.

STATUS OF AMENDMENTS

No claims have been amended in the present application subsequent to the receipt of the Final Office Action dated July 23, 2009 ("Final Office Action").

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SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1: The present invention, as described in independent claim 1 of the present application comprises a method of adjusting relative value of implemented computer configuration changes (*see, e.g.,* paragraph [0015], and Figure 1) the method comprising: identifying computer configuration changes in a computer system (*see, e.g.,* paragraphs [0015], [0046], and Figures 1 and 5), the computer configuration changes being identified by using a configuration tracking application installed either locally on the computer system or on a network on which the computer system is communicatively connected (*see, e.g.,* paragraphs [0018], [0019], [0046], and Figures 1 and 5); obtaining performance metrics for the computer system before and after computer configuration changes implemented in the computer system, the performance metrics being obtained by a performance collector application installed on the computer system connected (*see, e.g.,* paragraphs [0019], [0020], [0046], and Figures 1 and 5); and assessing effectiveness of the computer configuration changes based on the obtained performance metrics connected (*see, e.g.,* paragraphs [0022], [0023], [0047], and Figures 1 and 5), wherein the assessing is made by assigning a weight value that represents a relative value of performance improvement based on implementation of each of the computer configuration changes as compared to performance improvements from other configuration changes connected (*see, e.g.,* paragraphs [0027], [0047], and Figures 1 and 5).

Claim 9: The present invention, as described in independent claim 9 of the present application comprises a system comprising: hardware components in a computer system connected (*see, e.g.,* paragraphs [0018], [0019], [0028] - [0032], and Figures 1 and 3); installed software in the computer system connected (*see, e.g.,* paragraph [0023], and Figures 1 and 5); configuration settings indicating configuration conditions for the hardware components and the installed software connected (*see, e.g.,* paragraphs [0018], [0019], [0046], and Figures 1 and 5); and programmed instructions configured to: identify implemented configuration changes in the computer system connected (*see, e.g.,* paragraph [0046], and Figures 1 and 5), the configuration changes being identified by using a configuration tracking application installed either locally on the computer system or on a network on which the computer system is communicatively connected; collect performance

metrics associated with the computer system having the identified implemented configuration changes (*see, e.g.*, paragraphs [0019], [0020], [0046], and Figures 1 and 5), the performance metrics being collected by a performance collector application installed on the computer system; and weight effectiveness of the identified implemented configuration changes connected (*see, e.g.*, paragraphs [0019], [0020], [0046], and Figures 1 and 5), wherein a weight value is assigned that represents a relative value of performance improvement based on implementation of each of the identified implemented configuration changes as compared to performance improvements from other configuration changes (*see, e.g.*, paragraphs [0027], [0047], and Figures 1 and 5).

Claim 17: The present invention, as described in independent claim 17 of the present application comprises a system implemented on at least one computer for adjusting relative value of implemented configuration changes on computer systems in a network (*see, e.g.*, paragraphs [0018], [0019], [0028] - [0032], and Figures 1 and 3), the system comprising: means for obtaining configuration information for the computer systems in the network (*see, e.g.*, paragraphs [0018], "configuration tracker 606", and Figures 1 and 3), the configuration information being obtained by using a plurality of collectors installed either locally on the computer systems or on a network on which the computer systems are communicatively connected (*see, e.g.*, paragraphs [0026], [0027], "collectors 104", and Figure 2); means for obtaining performance data for the computer systems in the network (*see, e.g.*, paragraphs [0027], [0028], "collectors 104", "analyzers 110", and Figure 2), the performance metrics being obtained by a performance collector application installed on the computer systems (*see, e.g.*, paragraph [0027], "collectors 104", and Figure 2); means for recommending configuration changes to one of the computer systems in the network (*see, e.g.*, paragraph [0048], "operation 722", and Figure 6); means for obtaining performance data for the one of the computer systems after implementation of recommended configuration changes *see, e.g.*, paragraph [0048], "operations 724, 726", and Figure 6); and means for adjusting relative value of the recommended configuration changes based on an evaluation of the performance data after implementation of recommended configuration changes *see, e.g.*, paragraph [0048], "operations 728, 730", and Figure 6), wherein the relative value is adjusted by utilizing a weight value that represents a relative performance improvement based on implementation of

each of the recommended configuration changes as compared to performance improvements from other configuration changes (*see, e.g.*, paragraph [0047], "operations 710, 712", and Figure 6).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The only ground of rejection to be reviewed on appeal is the Examiner's rejection of claims 1-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2005/0086645 to Diao et al. in view of U.S. Patent Publication No. 2003/0135609 to Carlson.

ARGUMENT

I.   Rejection of Claims 1 and 5

Appellant respectfully requests that the rejection of claims 1-20 under 35 U.S.C. §
103(a) as being unpatentable over U.S. Patent Publication No. 2005/0086645 to Diao et al. in
view of U.S. Patent Publication No. 2003/0135609 to Carlson be reversed and withdrawn for
at least the reasons set forth below.

a.   Legal Standard

The Federal Circuit has outlined the burden on the PTO as follows[1]:

> In rejecting claims under 35 U.S.C. 103, the examiner bears the
> initial burden of presenting a *prima facie* case of obviousness.
> *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444
> (Fed. Cir. 1992). Only if that burden is met, does the burden of
> coming forward with evidence or argument shift to the
> applicant. *Id.* "A *prima facie* case of obviousness is established
> when the teachings from the prior art itself would appear to
> have suggested the claimed subject matter to a person of
> ordinary skill in the art." *In re Bell*, 991 F.2d 781, 782, 26
> U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re
> Rinehart*, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (CCPA
> 1976)). If the examiner fails to establish a *prima facie* case, the
> rejection is improper and will be overturned. *In re Fine*, 837
> F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First,
there must be some reasonable suggestion or motivation to modify the prior art reference or to
combine reference teachings. Second, there must be a reasonable expectation of success of
achieving the desired goals. Third, the prior art references when combined must teach all of
the claim limitations. The teaching or suggestion to make the claimed combination and the
reasonable expectation of success must both be gleaned from the prior art, and not based on
the Applicant's disclosure.[2]

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[1] *In re Rijckaert*, 9 F.3d 1531, 1532, (Fed. Cir. 1993)

[2] *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

b. Independent Claims 1, 9 and 17

In the case of Independent Claim 1, Appellant respectfully submits that a *prima facie* case of obviousness has not been established because Diao et al. and Carlson fail to teach or suggest all of the claim elements recited in claim 1.

i. 'Assignment of Weight Value' Not Taught or Suggested in Prior Art

In its rejection of claim 1, the final Office Action correctly recognizes that Diao et al. does not teach or suggest the assignment of a weight value, but the final Office Action incorrectly asserts that the Abstract of Carlson teaches this feature. Namely, the Abstract of Carlson describes that a determination is made of values for service level parameters and whether service level parameter values satisfy predetermined service level thresholds. The use of thresholds in the system of Carlson is not the same as the assignment of weight values that represent a relative value of performance improvement based on implementation of computer configuration changes, as specifically recited in claim 1. For example, the setting of a first threshold and a second threshold in Carlson does not affect any weighting values assigned to parameters to be compared against those first and second thresholds, and thus Carlson does not teach or suggest the assignment of weight values.

In the "Response to Arguments" section on page 9 of the final Office Action, it asserts that "assigning a weight value is nothing more than the service parameter setting in the GUI panel 800 of fig. 13 [of Carlson], see paragraph 0105." However, this capability in Carlson to set a service parameter value via a GUI panel 800 has nothing at all to do with assigning values that represent a relative value of performance improvement based on implementation of computer configuration changes, as explicitly recited in claim 1, but rather is an ad hoc value assigned by a user.

ii. 'Thresholds that Represent a Relative Value of Performance Improvement' Not Taught or Suggested in Prior Art

Furthermore, Carlson does not teach or suggest that his thresholds represent a relative value of performance improvement based on implementation of computer configuration changes as compared to performance improvements from other configuration changes, as recited in claim 1, since each service level parameter in the system of Carlson is not compared with other service level parameters or configuration changes.

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While paragraph 0012 of Diao describes a method of evaluating a configuration change by changing one or more configurations and evaluating performance metrics, Diao clearly does not teach or suggest using a weight value, as acknowledged on page 10 of the final Office Action, whereby the final Office Action relies on Carlson for this teaching. However, the assignment of a service parameter setting via a GUI panel 800 in the system of Carlson, as described in paragraph 0105 of that reference, cannot be associated with the claimed weight value, since the capability of setting a value to "standard availability", high availability", or "continuous availability" via the GUI panel 800 in Carlson (see Figure 13 of that reference) is not based on thresholds that represent a relative value of performance improvement based on implementation of computer configuration <u>changes as compared to performance improvements from other configuration changes</u>. Rather, it is an ad hoc selection made by a user in the system of Carlson.

iii.   Independent Claim 1 is Patentable of Diao and Carlson

Accordingly, for the reasons provided above, independent claim 1, as well as independent claims 9 and 17 that recite similar features to those discussed above with respect to claim 1, are patentable over the combined teachings of Diao and Carlson.

c.   <u>Dependent Claims 2, 10 and 18</u>:

With respect to dependent claim 2, that claim recites <u>receiving a user input with respect to which ones of a plurality of collectors are to be utilized to obtain the performance metrics for the computer system, the plurality of collectors providing an additional role of running tests on various components of the network</u>. See, for example, paragraph 0039 of the specification.

In its rejection of claim 2, the final Office Action asserts that paragraphs 0084 to 0089 of Carlson teach that a user input is made with respect to which ones of a plurality of collectors are to be utilized. Applicant respectfully disagrees. While an administrator can use a configuration policy tool to add service configuration policies and allocate storage space to a host bus adaptor in the system of Carlson, the service configuration policies do not collect information per se and thus do not correspond to the claimed "plurality of collectors" as recited in claim 2.

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Paragraph 0096 of Carlson, cited in the "Response to Arguments" section on page 11 of the final Office Action, merely describes that an administrator can configure storage by specifying service level attributes including performance and availability attributes, whereby this paragraph of Carlson does not teach or suggest the capability to set which ones of a plurality of collectors are to be utilized. Paragraphs 0130 – 0135 of Carlson deal with running tests, and do not teach or suggest the capability to set which ones of a plurality of collectors are to be utilized

Accordingly, dependent claim 2, as well as dependent claims 10 and 18 that recite similar features, are patentable over the combined teachings of Diao and Carlson.

d.   Dependent Claims 7 and 16:

Dependent claim 7 recites comparing the performance metrics obtained in the obtaining step against performance baselines stored beforehand; and based on the comparing, querying a data warehouse for antecedent configuration changes.

On page 11 of the final Office Action, in the "Response to Arguments" section, it asserts that paragraphs 0012, 0050 and 0058 – 0059 of Carlson teaches the features recited in this claim. Appellants respectfully disagree. Namely, paragraph 0012 of Carlson describes allocating storage space to a host logical volume, to deal with storage allocation needs. Paragraph 0050 of Carlson deals with enabling network users to access a lookup service that maintains registered service objects, whereby storage resources can be reallocated to a specified host and logical volume. Paragraphs 0058 and 0059 of Carlson describes the use of a Java Virtual Machine package to implement resources element configuration policies. None of these paragraphs in Carlson are relevant to comparing performance metrics newly obtained against previously obtained performance metrics, and none of these paragraphs in Carlson are relevant to querying a data warehouse for antecedent configuration changes.

Accordingly, dependent claim 7, as well as dependent claim 16 that recites similar features, patentably distinguish over the cited art of record.

CONCLUSION

For the reasons discussed above, Appellant respectfully submits that all pending claims are in condition for allowance, and respectfully requests that the rejections be reversed, and that the pending claims be allowed to issue.

Respectfully submitted,

Date *September 28, 2009*

By *Phillip J. Articola*

HEWLETT-PACKARD CO
Customer Number: 22879

William T. Ellis
Attorney for Appellant
Registration No. 26,874

Phillip J. Articola
Attorney for Appellant
Registration No. 38,819
Telephone (202) 672-5535
· Facsimile (202) 672-5399

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CLAIMS APPENDIX

1. A method of adjusting relative value of implemented computer configuration changes, the method comprising:

identifying computer configuration changes in a computer system, the computer configuration changes being identified by using a configuration tracking application installed either locally on the computer system or on a network on which the computer system is communicatively connected;

obtaining performance metrics for the computer system before and after computer configuration changes implemented in the computer system, the performance metrics being obtained by a performance collector application installed on the computer system; and

assessing effectiveness of the computer configuration changes based on the obtained performance metrics, wherein the assessing is made by assigning a weight value that represents a relative value of performance improvement based on implementation of each of the computer configuration changes as compared to performance improvements from other configuration changes.

2. The method of claim 1, further comprising increasing priority values for computer configuration changes resulting in performance improvements, the priority values being used for priority of the computer configuration changes in future recommendation sets, the method further comprising:

receiving a user input with respect to which ones of a plurality of collectors are to be utilized to obtain the performance metrics for the computer system, the plurality of collectors providing an additional role of running tests on various components of the network.

3. The method of claim 1, further comprising classifying computer configuration changes not resulting in performance improvements as secondary recommendations in future recommendation sets.

4. The method of claim 1, further comprising removing computer configuration changes not resulting in performance improvements from future recommendation sets.

5.   The method of claim 1, further comprising summarizing recommended actions identified for a computer user, configuration changes implemented, and the resulting change in performance.

6.   The method of claim 1, further comprising providing a report with performance trends on a plurality of computer systems where recommended configuration changes are not implemented.

7.   The method of claim 1, further comprising analyzing computer metrics on the computer system and proposing configuration changes based on the analysis of computer metrics,

the method further comprising:

comparing the performance metrics obtained in the obtaining step against performance baselines stored beforehand; and

based on the comparing, querying a data warehouse for antecedent configuration changes.

8.   The method of claim 1, wherein obtaining performance metrics for the computer system before and after computer configuration changes comprises accessing stored computer metrics in a database.

9. A system comprising:

hardware components in a computer system;

installed software in the computer system;

configuration settings indicating configuration conditions for the hardware components and the installed software; and

programmed instructions configured to:

identify implemented configuration changes in the computer system, the configuration changes being identified by using a configuration tracking application installed either locally on the computer system or on a network on which the computer system is communicatively connected;

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collect performance metrics associated with the computer system having the identified implemented configuration changes, the performance metrics being collected by a performance collector application installed on the computer system; and

weight effectiveness of the identified implemented configuration changes, wherein a weight value is assigned that represents a relative value of performance improvement based on implementation of each of the identified implemented configuration changes as compared to performance improvements from other configuration changes.

10. The system of claim 9, further comprising programmed instructions configured to analyze the computer system and propose configuration changes based on the analysis, the identify programmed instructions further comprising:

receiving a user input with respect to which ones of a plurality of collectors are to be utilized to obtain the performance metrics for the computer system, the plurality of collectors providing an additional role of running tests on various components of the network.

11. The system of claim 10, wherein the proposed configuration changes are prioritized based on weighted effectiveness.

12. The system of claim 9, further comprising programmed instructions configured to provide reports on implemented configuration changes.

13. The system of claim 9, wherein proposed configuration changes with low weighted effectiveness are removed from a recommendation set.

14. The system of claim 9, wherein the computer system is one of a plurality of computer systems coupled to a common network.

15. The system of claim 14, wherein the configuration changes identified correspond to configuration change proposals established based on performance analysis of identified configuration changes in other computer systems in the plurality of computer systems coupled to the common network.

16. The system of claim 15, wherein configuration change proposals have a priority based on the weighted effectiveness of the identified implemented configuration changes,

the programmed instructions further configured to:

compare the performance metrics obtained in the collecting step against performance baselines stored beforehand; and

based on the comparing, query a data warehouse for antecedent configuration changes.

17. A system implemented on at least one computer for adjusting relative value of implemented configuration changes on computer systems in a network, the system comprising:

means for obtaining configuration information for the computer systems in the network, the configuration information being obtained by using a plurality of collectors installed either locally on the computer systems or on a network on which the computer systems are communicatively connected;

means for obtaining performance data for the computer systems in the network, the performance metrics being obtained by a performance collector application installed on the computer systems;

means for recommending configuration changes to one of the computer systems in the network;

means for obtaining performance data for the one of the computer systems after implementation of recommended configuration changes; and

means for adjusting relative value of the recommended configuration changes based on an evaluation of the performance data after implementation of recommended configuration changes, wherein the relative value is adjusted by utilizing a weight value that represents a relative performance improvement based on implementation of each of the recommended configuration changes as compared to performance improvements from other configuration changes.

18. The system of claim 17, wherein configuration changes are recommended based on relative value where high value indicates performance improvement based on the

configuration changes, wherein the means for obtaining configuration information further comprises:

receiving means for receiving a user input with respect to which ones of a plurality of collectors are to be utilized to obtain the performance metrics for the computer systems, the plurality of collectors providing an additional role of running tests on various components of the network.

19. The system of claim 17, further comprising means for reporting relative value of the recommended configuration changes.

20. The system of claim 17, further comprising eliminating a configuration change from a recommendation set where the configuration change has a low relative value.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.